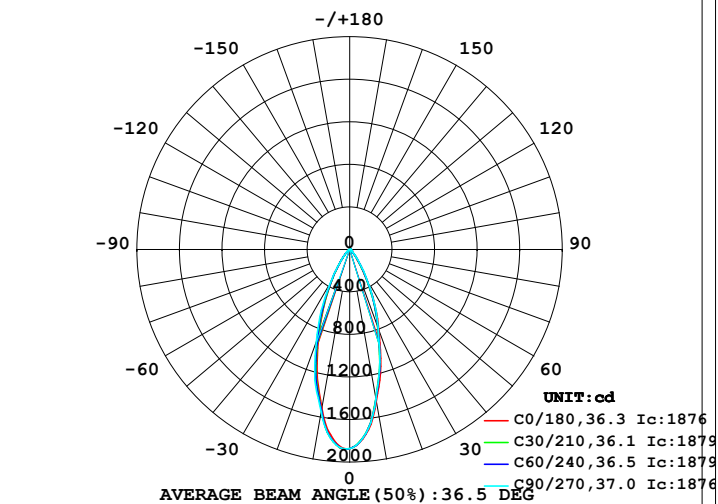


LUMINAIRE PHOTOMETRIC TEST REPORT

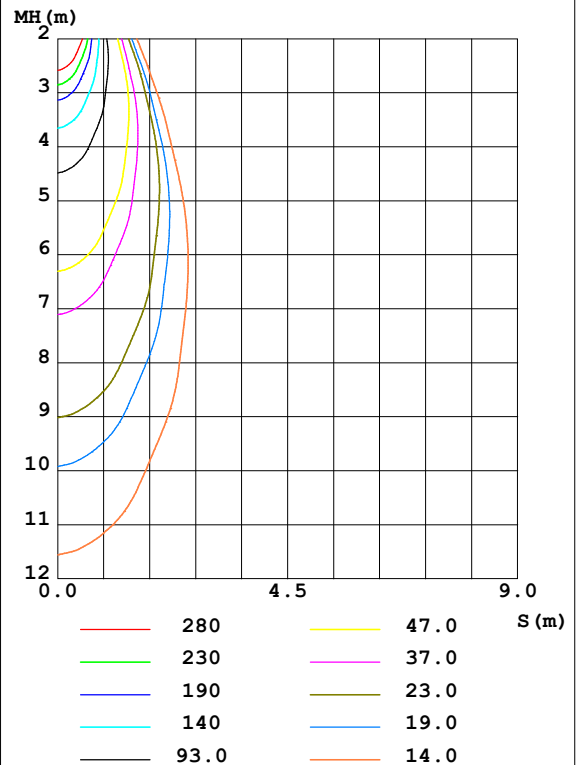
Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 61.19 lm/W			
MODEL	3000K CRI90	I _{max} (cd)	1879	S/MH(C0/180)	0.60
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	0.64
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	924.03	η UP,DN(C0-180)	0.0,47.9
NOMINAL FLUX(lm)	924.033	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.240m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1448	1443	1426	1451	1512	1513	1550	1523	0- 10	160.2	160.2	17.3,17.3
20	807.5	791.1	786.4	809.0	841.6	855.4	921.3	904.1	10- 20	320.0	480.1	52,52
30	306.7	317.0	324.6	343.1	346.2	338.1	364.3	344.3	20- 30	259.4	739.5	80,80
40	91.10	92.78	94.92	97.02	103.4	103.7	109.5	103.6	30- 40	119.4	858.9	93,93
50	23.85	24.30	24.70	24.98	26.63	26.23	27.98	26.82	40- 50	42.68	901.6	97.6,97.6
60	8.436	8.449	8.156	8.176	9.107	8.926	9.060	8.618	50- 60	13.48	915.1	99,99
70	3.987	3.919	3.798	4.131	5.021	4.926	4.724	4.274	60- 70	6.206	921.3	99.7,99.7
80	0.5927	0.5392	0.5523	0.5432	0.4892	0.5249	0.4843	0.4935	70- 80	2.312	923.6	100,100
90	0.4822	0.4888	0.4890	0.5006	0.2039	0.2151	0.2191	0.2268	80- 90	0.4272	924.0	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 886.65 lm

%lum = 96.0%

%lamp = 96.0%

Conical surface Flux(120deg): 915.09 lm

%lum = 99.0%

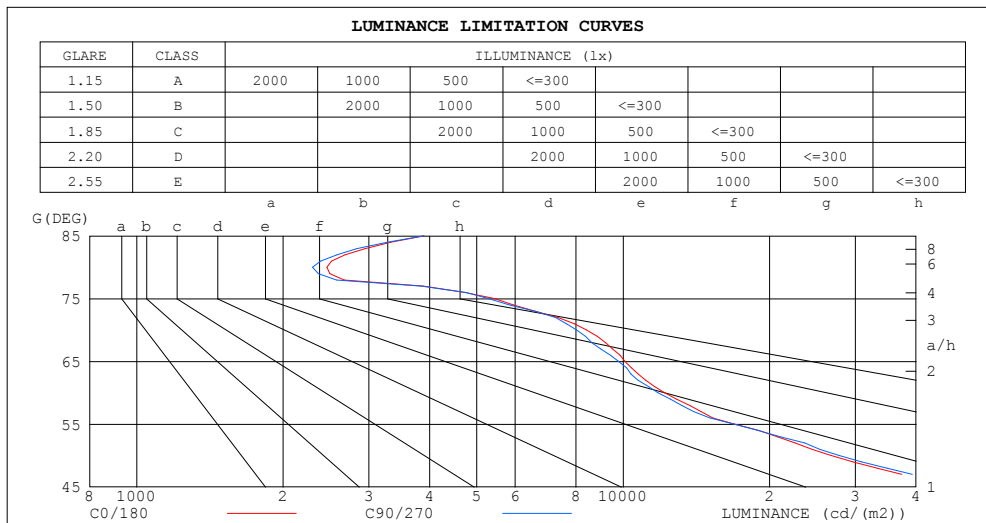
%lamp = 99.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3894	3893
80	2462	2299
75	5440	5288
70	8408	8027
65	10090	9777
60	12169	11790
55	16922	16897
50	26757	27780
45	48085	51314

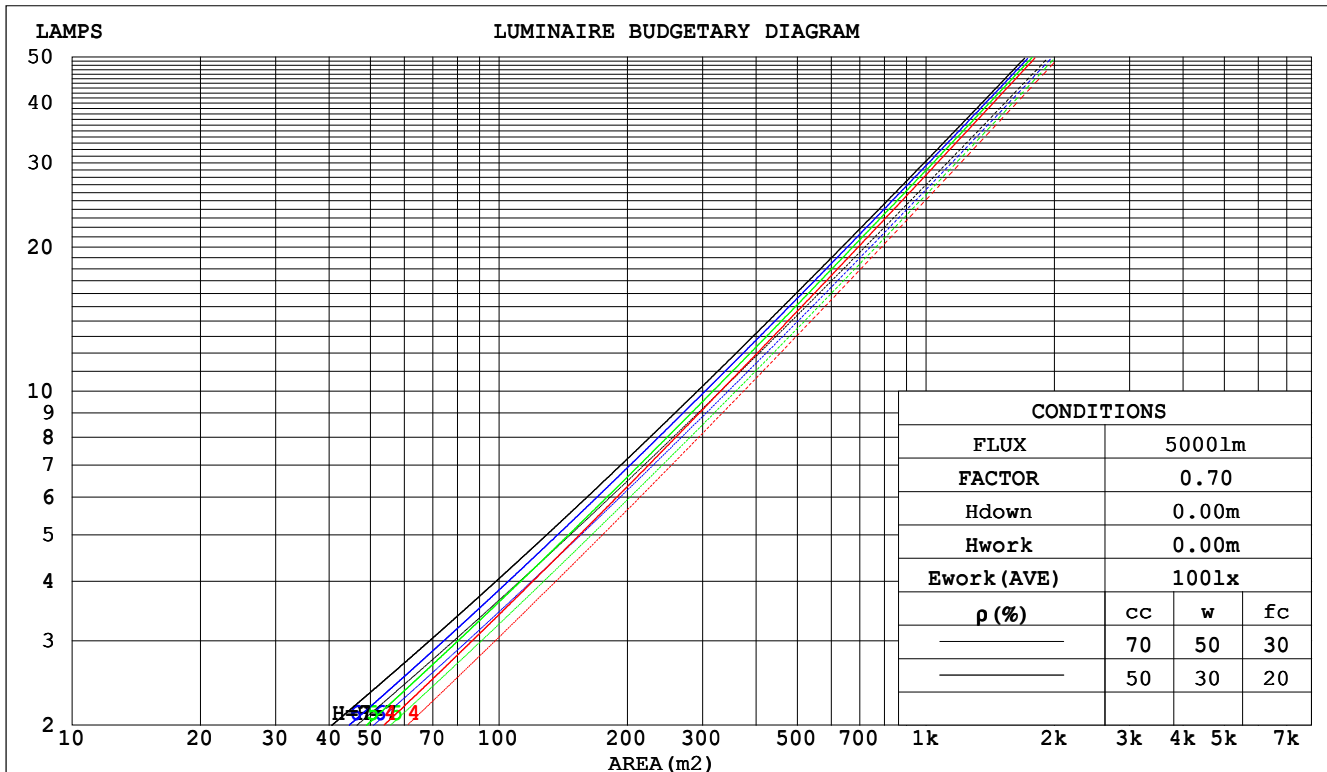
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.01	.97	1.03	.99	.96	.99	.97	.94	.96	.94	.92	.94	.92	.90	.89
3.0	.98	.93	.90	.97	.92	.89	.94	.91	.88	.92	.89	.86	.89	.87	.85	.83
4.0	.92	.87	.83	.91	.87	.83	.89	.85	.82	.87	.84	.81	.85	.82	.80	.79
5.0	.87	.82	.78	.86	.81	.78	.85	.80	.77	.83	.79	.76	.82	.78	.76	.74
6.0	.83	.77	.73	.82	.77	.73	.81	.76	.73	.79	.75	.72	.78	.74	.72	.70
7.0	.79	.73	.69	.78	.73	.69	.77	.72	.69	.76	.71	.68	.74	.71	.68	.67
8.0	.75	.69	.66	.74	.69	.65	.73	.69	.65	.72	.68	.65	.71	.68	.65	.63
9.0	.71	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.68	.64	.62	.60
10.0	.68	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.66	.62	.59	.58



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm					
NAME: ALST55-15G30-F			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:46		Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.168	.095	.030	.161	.092	.029	.148	.085	.027	.137	.079	.025	.126	.073	.024	
2.0	.159	.087	.027	.154	.085	.026	.143	.080	.025	.133	.075	.023	.124	.070	.022	
3.0	.151	.080	.024	.146	.078	.024	.137	.074	.023	.129	.071	.022	.121	.067	.021	
4.0	.143	.074	.022	.139	.073	.021	.131	.070	.021	.124	.067	.020	.117	.064	.019	
5.0	.136	.069	.020	.132	.068	.020	.126	.065	.019	.119	.063	.019	.114	.061	.018	
6.0	.129	.065	.019	.126	.064	.018	.120	.062	.018	.115	.060	.018	.110	.058	.017	
7.0	.123	.061	.017	.120	.060	.017	.115	.058	.017	.111	.057	.016	.106	.055	.016	
8.0	.118	.057	.016	.115	.057	.016	.111	.055	.016	.106	.054	.016	.102	.053	.015	
9.0	.113	.054	.015	.111	.054	.015	.106	.053	.015	.103	.051	.015	.099	.050	.015	
10.0	.108	.052	.014	.106	.051	.014	.102	.050	.014	.099	.049	.014	.096	.048	.014	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.132	.114	.099	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.113	.091	.121	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.131	.099	.074	.112	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.121	.087	.061	.104	.075	.053	.072	.052	.038	.042	.031	.022	.013	.010	.007	
6.0	.114	.077	.051	.098	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.107	.070	.044	.092	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.101	.063	.037	.087	.055	.033	.060	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.096	.058	.032	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.053	.028	.078	.046	.025	.054	.033	.018	.032	.019	.011	.010	.006	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm											
NAME: ALST55-15G30-F						TYPE:		WEIGHT:			
SPEC.:						DIM.:		SERIAL No.:			
MFR.:						SUR.:46		Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H		20.1	21.0	20.3	21.1	21.3	20.6	21.4	20.8	21.6	21.8
	3H	20.1	20.9	20.3	21.1	21.3	20.5	21.3	20.8	21.5	21.7
	4H	20.0	20.8	20.3	21.0	21.2	20.5	21.2	20.8	21.5	21.7
	6H	19.9	20.7	20.2	20.9	21.1	20.4	21.1	20.7	21.4	21.6
	8H	19.9	20.6	20.2	20.8	21.1	20.4	21.0	20.7	21.3	21.6
	12H	19.9	20.5	20.2	20.8	21.1	20.3	21.0	20.6	21.2	21.5
4H	2H	19.9	20.7	20.2	20.9	21.1	20.4	21.2	20.7	21.4	21.6
	3H	20.0	20.6	20.3	20.9	21.1	20.4	21.1	20.7	21.3	21.6
	4H	19.9	20.5	20.3	20.8	21.1	20.4	21.0	20.7	21.3	21.6
	6H	19.8	20.4	20.2	20.7	21.0	20.3	20.8	20.6	21.1	21.5
	8H	19.8	20.3	20.2	20.6	21.0	20.2	20.7	20.6	21.1	21.4
	12H	19.8	20.2	20.2	20.6	21.0	20.2	20.6	20.6	21.0	21.4
8H	4H	19.8	20.3	20.2	20.6	21.0	20.2	20.7	20.6	21.1	21.4
	6H	19.7	20.1	20.1	20.5	20.9	20.1	20.5	20.6	20.9	21.4
	8H	19.7	20.0	20.1	20.4	20.9	20.1	20.5	20.5	20.9	21.3
	12H	19.6	19.9	20.1	20.4	20.8	20.1	20.4	20.5	20.8	21.3
12H	4H	19.8	20.2	20.2	20.6	21.0	20.2	20.6	20.6	21.0	21.4
	6H	19.7	20.0	20.1	20.4	20.9	20.1	20.4	20.5	20.9	21.3
	8H	19.6	19.9	20.1	20.4	20.8	20.1	20.4	20.5	20.8	21.3
Variations with the observer position at spacings:											
S = 1.0H	+ 2.5 / - 5.0					+ 2.8 / - 5.5					
1.5H	+ 4.0 / - 4.4					+ 4.4 / - 4.7					
2.0H	+ 4.4 / - 3.0					+ 4.7 / - 3.1					

CIE Pub.117, 924.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.3)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

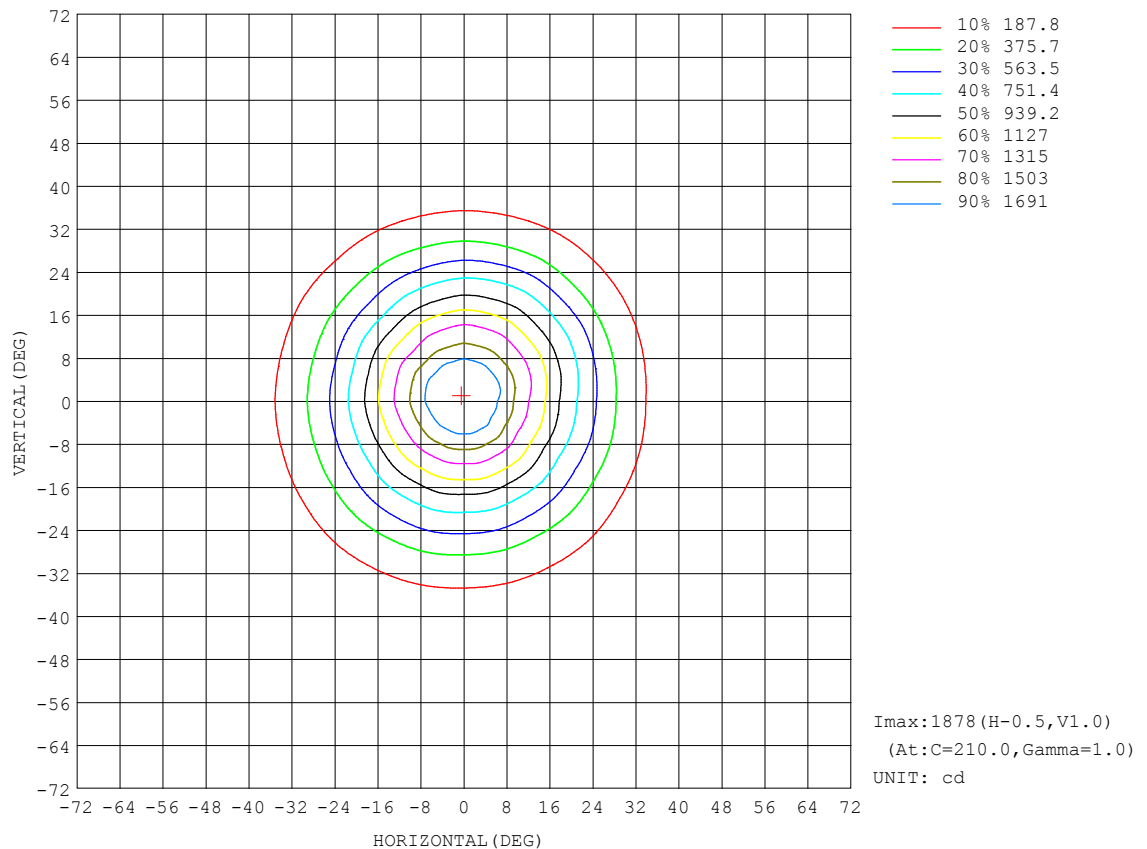
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

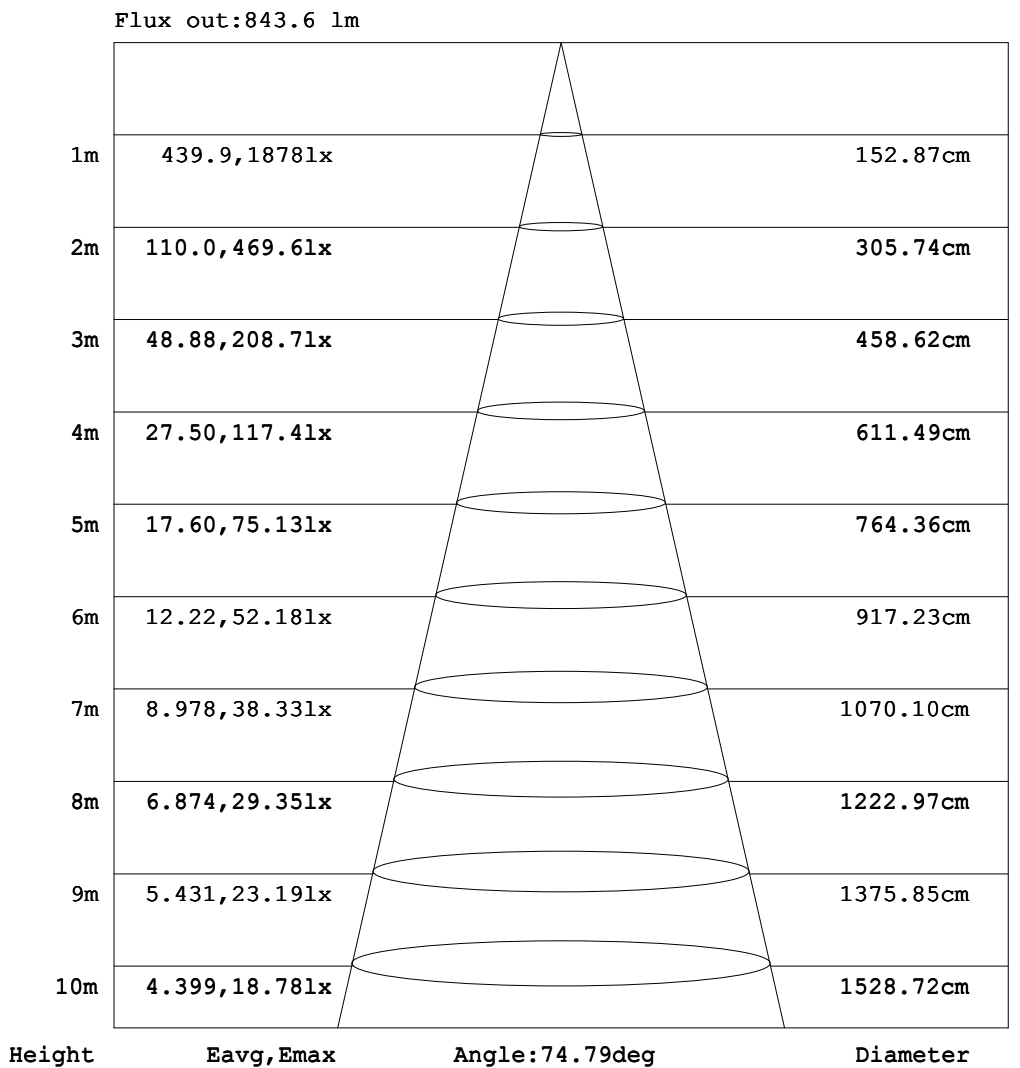


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

AAI Figure

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



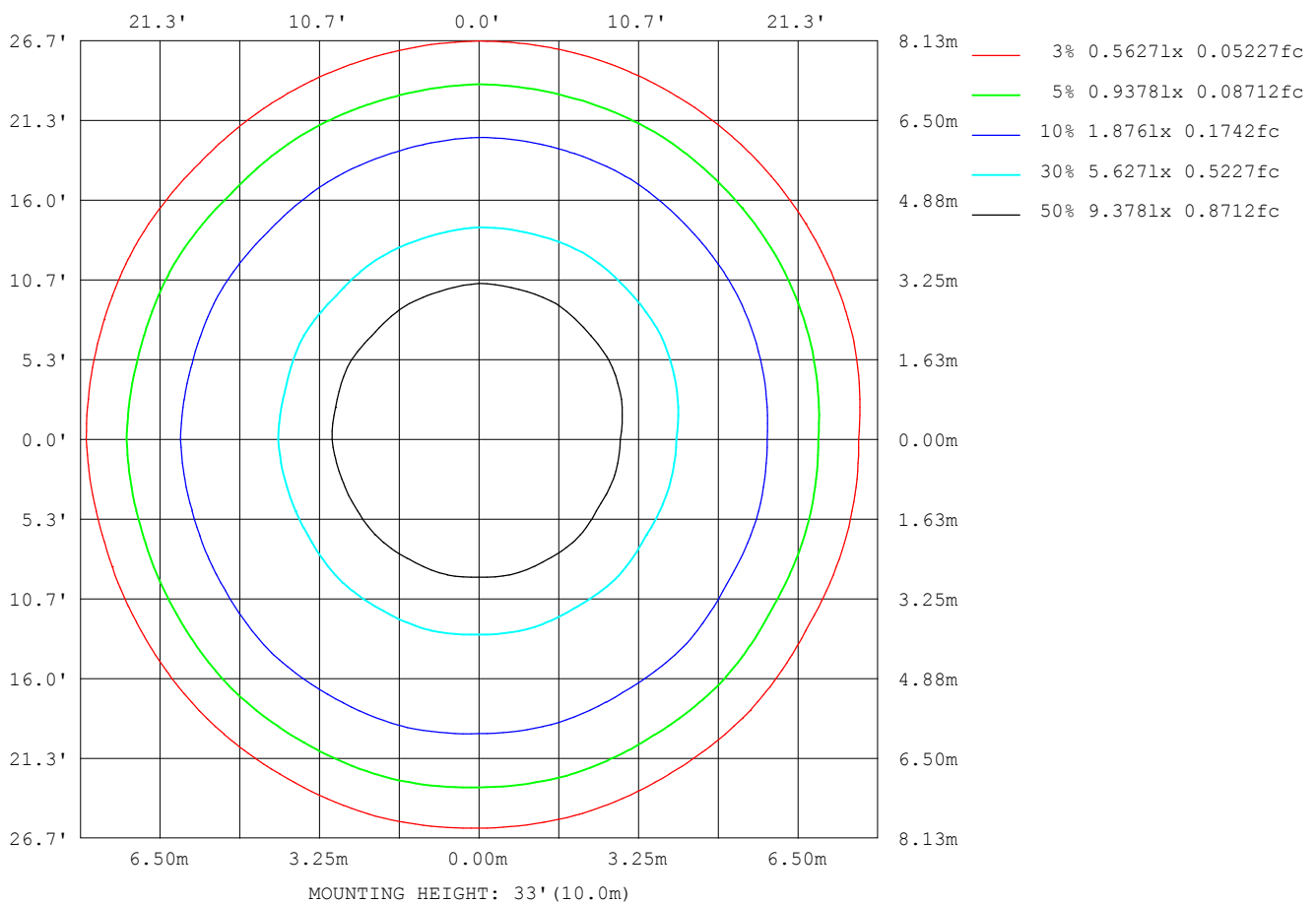
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.240m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:225.1V I:0.0700A P:15.10W PF:0.9580 Freq:0Hz Lamp Flux:924.033x1 lm		
NAME: ALST55-15G30-F	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

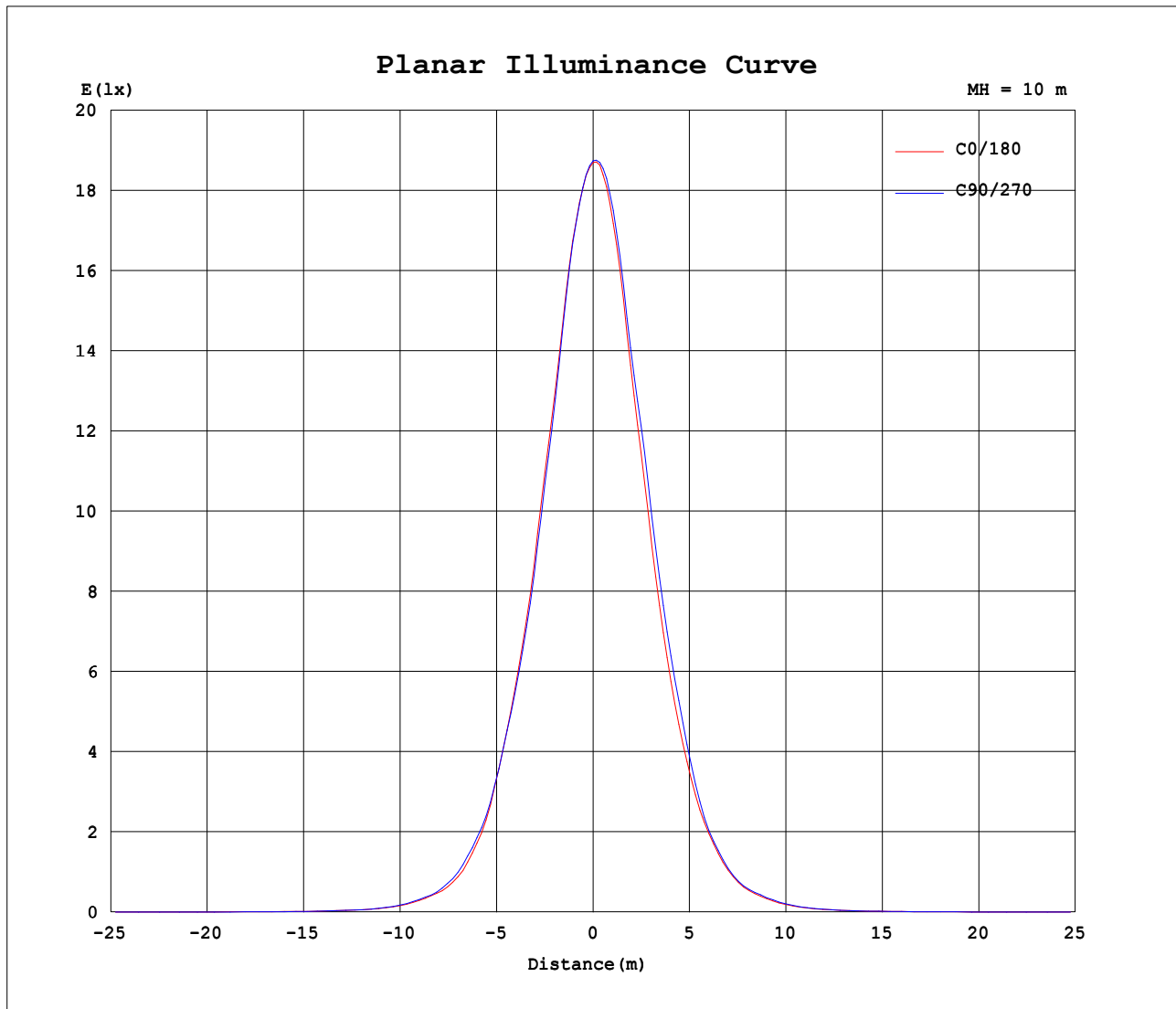
AvgL	cd/m2
L_0~180 (65) av	10704
L_0~180 (75) av	5991
L_0~180 (85) av	3005
L_90~270 (65) av	10574
L_90~270 (75) av	5712
L_90~270 (85) av	3047
L_45 (65) av	10523
L_45 (75) av	5764
L_45 (85) av	3186

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.240m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```